

# Impaired Driving



# LESSON OBJECTIVES

Upon successfully completing this lesson, the student will:

- Know the facts related to DWI crashes.
- Know how alcohol affects you physically and your ability to drive.
- Know the characteristics of alcohol and how it affects the body
- Know the Navy & Marine Corps requirements on alcohol abuse prevention and deglamorization campaigns.
- Know ways to intervene to prevent shipmates from drinking and driving.

# ULTIMATE GOAL:



Increase DWI Deterrence and  
Decrease Alcohol-Related Crashes,  
Deaths and Injuries

# Drunk and Impaired Drivers Kill or Injure A Person Every Minute!

Approximately 43,000 people die each year on U.S.  
Highways

Alcohol is a factor in at least half of those deaths

Serious Injuries to more than 350,000

Cost range is in the tens of billions of dollars

# Alcohol Facts

- Alcohol is involved in approximately **44%** of all fatal crashes, **9%** of reported injury crashes and **5%** of non-injury crashes.
- These alcohol related crashes, injuries, and fatalities cost society approximately **\$46 billion** in lost productivity, medical cost, property damage and other direct expenditures. Over **\$5 billion** of these costs are for health care.

There is no such thing as a drunk driving accident.

Virtually all crashes involving alcohol/drugs could have been avoided if the impaired person were sober.

# THE DWI PROBLEM

- About half of all fatal crashes involve drinking drivers
- Alcohol-related crashes are nine times more likely to result in death

# WHO CONTRIBUTES TO THE DWI PROBLEM

- Heavy Drinkers - May be addicted to alcohol or have a pattern of problem drinking. They may drive drunk again and again.
- Social Drinkers - May have “one too many” just one time - but that one time can be deadly.



# HOW ALCOHOL AFFECTS YOU PHYSICALLY

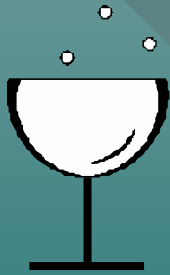
- Alcohol is absorbed quickly into the bloodstream.
- Alcohol slows the thought processes in the brain.
- Alcohol is collected in the body and processed (eliminated) slowly.

# HOW ALCOHOL AFFECTS YOUR DRIVING SKILLS

- Poor Judgement - Alcohol dulls areas of the brain that enable people to make sensible, safe decisions.
- Visual Problems - Alcohol can cause double & blurred vision, making it hard to see.
- Slower Reaction Time - Drinking slows reflexes and interferes with coordination. Drivers who can't react quickly are dangerous to themselves and others.

# Drivers with BAC 0.10% or Above

## (NATIONAL STATISTICS)



Weekend Nights



10% or More

On typical Friday and Saturday  
nights



one out of seven drivers leaving a bar  
is DWI!

About a third of all  
drivers arrested for DWI



Are repeat  
offenders

# **ALCOHOL CHARACTERISTIC S**

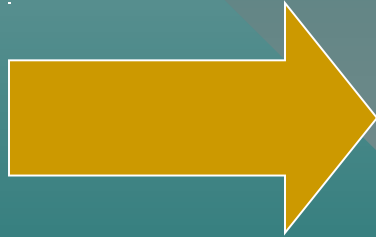
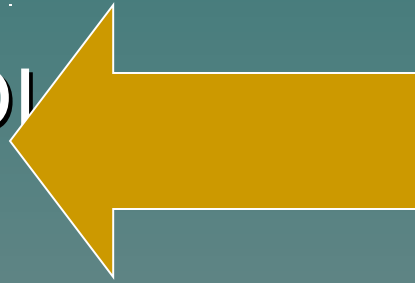
# ALCOHOL

A family of closely-related chemicals whose molecules are made up of hydrogen, carbon and oxygen

# SOME TYPES OF ALCOHOL

METHYL ALCOHOL

(Methanol)



ETHYL ALCOHOL

(Ethanol)

ISOPROPYL ALCOHOL

(Isopropanol)





# ETHANOL

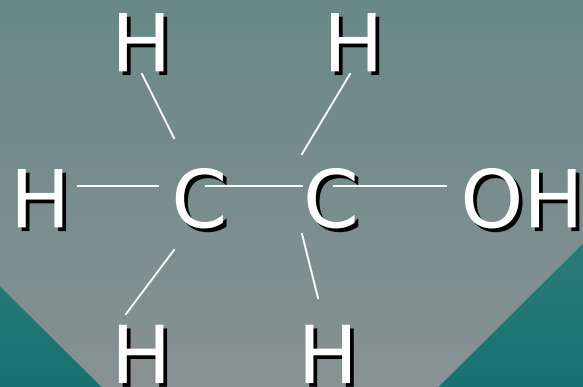
Ethyl Alcohol

(Intended for human consumption)

## Chemical Symbols

ETOH

C<sub>2</sub>H<sub>5</sub>OH



# PRODUCTION OF ETHANOL

## FERMENTATION

Yeast combines with sugars from fruit or grains in a chemical reaction that results in ETOH

## DISTILLATION

Fermented beverage is boiled at a controlled temperature to extract and concentrate the ethanol fumes

# STANDARD-SIZED DRINKS



## A CAN OF BEER

12 ounces of fluid @ 4% alcohol equals  
0.48 ounces of pure ethanol



## A GLASS OF WINE

4 ounces of fluid @ 12% alcohol  
equals 0.48 ounces of pure ethanol



## A SHOT OF WHISKEY (80-PROOF)

1 and 1/4 ounces @ 40%  
alcohol equals 0.50 ounces of  
pure ethanol

**ALCOHOL IS THE MOST  
ABUSED DRUG IN THE  
UNITED STATES.**

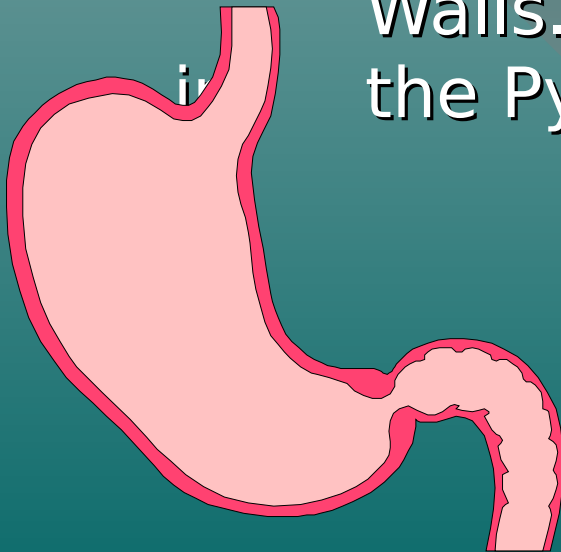


Alcohol is a Central  
Nervous System  
Depressant

# Absorption of Alcohol

Getting the ethanol out of the stomach and into the blood

20% is diffused through the Stomach Walls. The remaining 80% is absorbed in the Pylorus (small intestine)



## DISTRIBUTION OF ALCOHOL

Getting the ethanol into the body's tissues  
and organs

### BASIC PRINCIPLE

Ethanol goes wherever it finds water

# Which Parts of the body have lots of water?

The **BRAIN**; The **LIVER**; **MUSCLE**  
**TISSUE**

WHICH PARTS DON'T?

**BONES**; **FATTY TISSUE**

The average male is 68% water.

The average female is only 55% water.

# METABOLISM IN THE LIVER

- The liver **burns** the ethanol (i.e., causes a chemical reaction of ethanol with oxygen)
- The process is aided by an enzyme called **alcohol dehydrogenase**
- The ultimate products of the chemical reaction are carbon dioxide and water
- Due to metabolism, the average person's BAC drops by about **0.015% per hour**



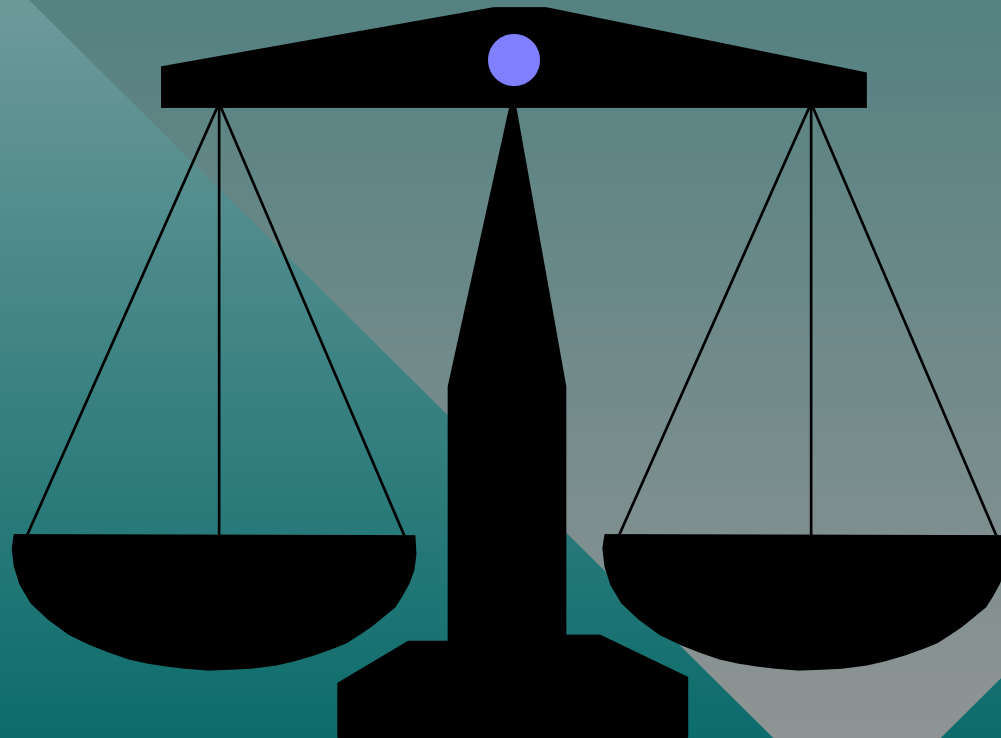
# ELIMINATION OF ALCOHOL

**NOTHING BUT TIME WILL SOBER YOU UP**

There are many myths about “getting sober fast” but none of them work!

- Cold shower
- Fresh air
- Exercise
- Black Coffee

# **THE LEGAL ENVIRONMENT**



# SESSION OBJECTIVES

- Discuss the elements of DWI offenses.
- Discuss the provisions of the implied consent law.
- What is BAC
- Legal Presumptions
- Discuss OPNAVINST 5350.4B
- Discuss MCO 5300.12A
- Discuss the relevance of chemical test evidence.

# GENERAL DETERRENCE



THE FEAR OF ARREST

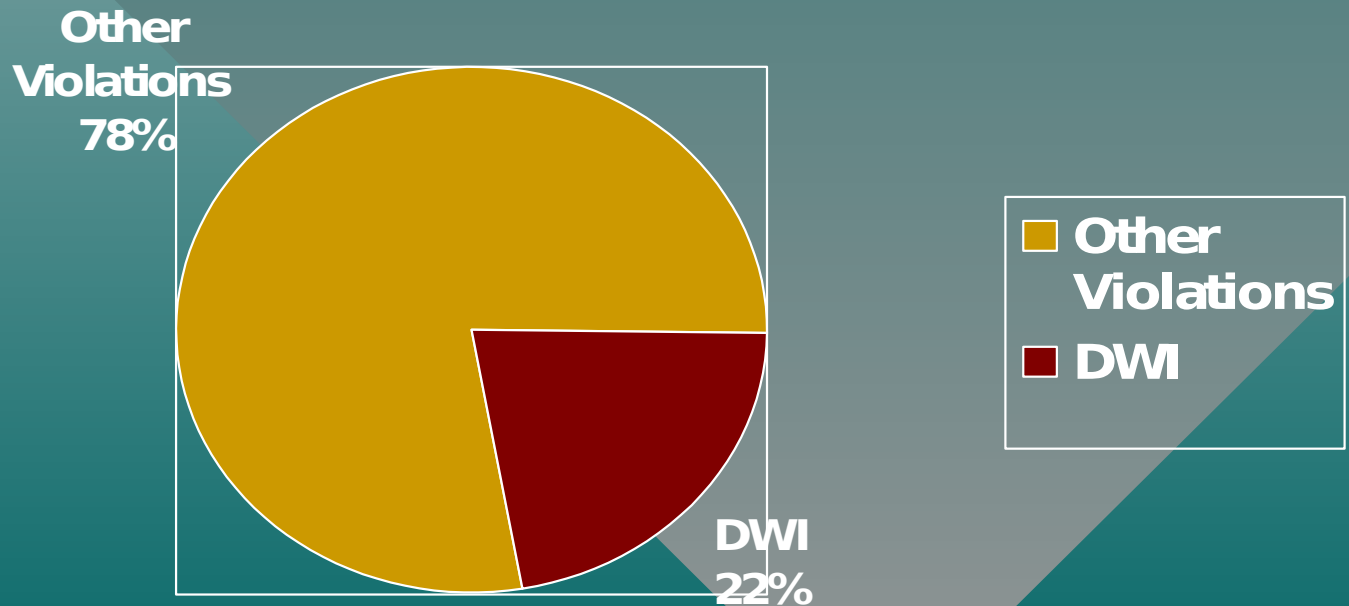
THERE IS NO REASON TO  
**FEAR** ARREST



UNLESS THERE REALLY IS SOME  
**RISK** OF ARREST

# Citations issued to violators later found to have BACs between 0.10% and 0.20%

## Ft. Lauderdale BAC Study



# BASIC DWI STATUTE

It is unlawful for any person to....

- Operate or be in actual physical control of...
- any vehicle....
- within this state...
- while under the influence of alcohol and/or any drug.

# Implied Consent

- ▼ Any person who operates a vehicle upon the public highways of this state...
- ▼ shall be deemed to have given consent to submit to a chemical test...
- ▼ for the purpose of determining the alcohol and/or drug content of the blood...
- ▼ when arrested for any acts allegedly committed while operating or in actual physical control of a vehicle while under the influence of alcohol and/or any drug.



# BLOOD ALCOHOL CONCENTRATION

What does it mean?

BAC is the number of grams of alcohol found in 100 milliliters of the person's blood.

Example: If a person has a BAC of 10%, then there is one-tenth of a gram of alcohol in every 100 milliliters of the person's blood.

# BLOOD ALCOHOL CONCENTRATION

How much does my BAC  
Increase with each drink?

It depends on your body weight  
and the type of drink.

# BLOOD ALCOHOL CONCENTRATION

There are several factors that will determine the extent of your BAC.

- How fast you drink, your mood, and the amount of food in your stomach.
- The amount of alcohol in mixed drinks varies considerably, depending on the bartender or host and the type of liquor used.

# ILLEGAL “PER SE” STATUTE

It is unlawful for any person to...

- Operate or be in actual physical control of any vehicle within the state while having a BAC at or above state’s level.
- 18 States currently have a .08% DUI Law

# LEGAL PRESUMPTIONS

- 0.10% or more...

Presumed Guilty under most states “per se” law.

- At least 0.08% but less than 0.10%...

Presumed under the influence.

- At least 0.05% but below 0.08%...

No presumption.

- Less than 0.05%...

Presumed not under the influence.

# OPNAVINST 5350.4B

- “Zero Tolerance” Alcohol & Drug Abuse
- Aggressive random urinalysis screening
- Violation Provisions
  - Revocation of Driving Privileges
  - Discipline as deemed appropriate (UCMJ)

# MCO 5300.12A

“Zero Tolerance” Alcohol & Drug Abuse  
Aggressive random urinalysis screening  
Violation Provisions

Revocation of Driving Privileges  
Discipline as deemed appropriate  
(UCMJ)

# KEY POINT:

- ➡ Chemical test evidence is not necessarily needed, to obtain a DWI conviction.



# Intervention

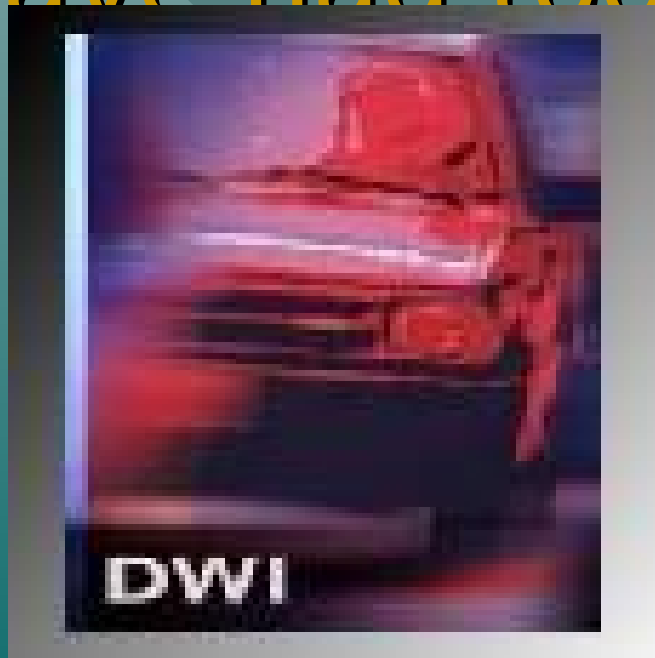
- The responsibility for keeping a drinker from driving belongs to everyone.

# There are ways to keep friends from driving after they have had too much to drink.



- Arrange for a safe ride home.
- Be a designated driver

There are ways to keep friends from driving after they have had too much to drink.



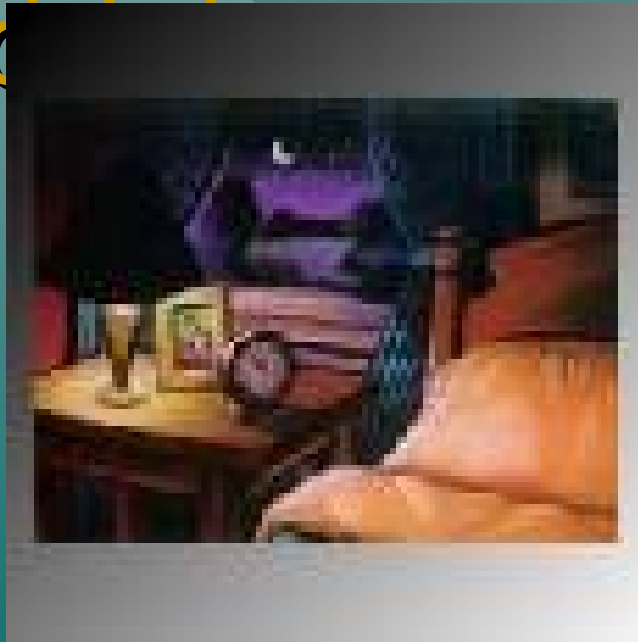
- Never ride in a vehicle operated by someone who has been drinking.

# There are ways to keep friends from driving after they have had too much to drink



- If you can't control the driver/person try to get the keys of the car.

# There are ways to keep friends from driving after they have had too much to



- Stay put. Stay where you are until you sober up. It may take a couple of hours or it may mean staying overnight.

# Closing

## **Drinking And Driving Threatens Everyone!**

Driving while intoxicated or under the influence of drugs

- DANGEROUS
- ILLEGAL
- IRRESPONSIBLE

**DO YOUR PART TO  
PREVENT INJURIES AND  
DEATHS.**

**BE SMART - DRIVE**

